SECTION 151

STEEL PILES

151.1 GENERAL

Steel piles furnished under this specification shall consist of structural steel shapes and other steel shapes that fulfill the requirements prescribed below for such material and shall conform to the details and dimensions indicated by the drawings and specifications relating directly thereto. The kind and type of steel piling to be used in the Work shall be as indicated on the plans or Supplementary Specifications.

151.2 REFERENCES

151.2.1 ASTM
A 36
A 252
A 328

151.2.2 AASHTO
M 150
M 183

151.2.3 American Welding Standard Specifications for Welding Highway and Railroad Bridges

151.2.4 This publication
SECTION 157
SECTION 502

151.3 MATERIALS

151.3.1 The CONTRACTOR shall furnish the ENGINEER with manufacturer's certificate indicating that structural steel piles and pile columns and steel pipe piles and pipe pile columns conform with all the requirements herein provided.

151.3.2 Unless otherwise provided, after installation, the exposed areas of steel piles or steel pile columns, together with all steel bracing, shall be given 3 coats of paint in conformity with Section 157. The areas to be painted shall extend from the bottom of the concrete cap to 2 feet below ground surface or to the surface of the water, when the water surface is normal or below normal.

151.3.3 When approved by the ENGINEER, the CONTRACTOR, for his convenience, may furnish steel piles over 30 feet in length or in lengths less than the full length of piles shown on the plans. Such piles shall be spliced not more than two splices per pile to obtain not less than required length, with minimum piece length of 5 feet prior to driving. All splicing shall conform to details shown on the plans and will be considered incidental to the completion of the Work and no payment will be made therefor.

151.3.4 All welding shall conform with American Welding Society Standard Specifications for Welding Highway and Railroad Bridges.

151.3.5 Structural Steel Piles--Structural steel for bearing piles shall conform to the requirements of AASHTO M 183 or ASTM A 36. Camber and sweep in excess of the mill tolerance will not be accepted. Unless otherwise noted, HPS 10 x 57 piling may be substituted where HP 10 x 57 piling is called for on the plans.

151.3.6 Closed End Steel Pipe Piles--Steel pipe piles shall conform with ASTM A 252, Grade 2. Concrete for filling steel pipe piles shall have a minimum 28 day compressive strength of 3000 psi.

151.3.7 Steel Pipe Pile Columns--Steel pipe pile columns shall conform with ASTM A 252, Grade 2. Concrete for filling steel pipe columns shall have a minimum 28 day compressive strength of 3000 psi.

151.3.8 Structural Steel Pile Columns--Structural steel for pile columns shall conform with AASHTO M 183 or ASTM A 36. Camber and sweep in excess of the mill tolerance will not be accepted. Unless noted otherwise, HPS 10 x 57 piling may be substituted where HP 10 x 57 piling is called for on the plans.

151.3.9 Steel sheet piles shall conform to ASTM A 328.

151.3.10 Steel sheet piling shall consist of standard interlocking sheet pile sections or as shown on the plans and specified herein.

151.4 MEASUREMENT AND PAYMENT

Structural or round bearing piles shall be measured by the linear foot, complete in place, to the specified cut off point including all splices. Sheet pile shall be paid for as specified in Bid Proposal. Payment for driving piling shall be as specified in Section 502.